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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,656

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Junbiao Zhang

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04/27/2009

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EXAMINER

SHOLEMAN, ABU S

ART UNIT

PAPER NUMBER

2437

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,656	<b>Applicant(s)</b> ZHANG ET AL.	
	<b>Examiner</b> ABU SHOLEMAN	<b>Art Unit</b> 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. Claims 1-24 are pending and claims 1, 11, and 16 are amended.
2. Applicant's arguments, see pages 7-10, filed 02/13/2009, with respect to the rejection(s) of claim(s) 1-24 under 35 U.S.C § 103(a) have been fully considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter et al (20030061607) (hereinafter Hunter) in view of Tam et al (20030068043) (hereinafter Tam).

**As per claim 1**, Hunter discloses "A method of watermarking digital media data at a user device comprising" as (on page 3, paragraph 0041, watermarking at set top box ) the steps of:  
"receiving encrypted digital media data; decrypting the digital media data into decrypted data; decoding the decrypted data into uncompressed data;

a user device specific indicator, said digital media data content related information selected from a group consisting of said uncompressed data, an audio portion of said uncompressed data, and a video portion of said uncompressed data, such that said watermark signal exhibits a relatively changed characteristic pattern over at least a segment of the uncompressed data into which the watermark signal is embedded; and embedding the watermark signal into the uncompressed data” as ( on page 3, paragraph 0041 and 0166 and FIG 1, Set Top Box decode the content in uncompressed data and on page 13, paragraph 0167, watermark is generated by a media content player(e.g. set top box), with or without a networked server, during playback. Thus, the watermark may be generated in real time each time a movie is played and paragraph 0172, a player or set top box may be programmed to generate a unique transactional identification code for use in a watermark. The code may include a set top box identification code), **but Hunter fails to disclose** “generating a watermark signal comprising a digital media data content-related information “.

However, Tam disclose “generating a watermark signal comprising a digital media data content-related information” as (on page 3, paragraph 0049, watermark is generated by adding copyright, license and user information).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hunter with those of Tam in order to develop a composite watermark including content information, thereby improving copyright protection in digital content.

**As per claim 2**, Hunter in view of Tam disclose “ wherein the digital media content-related information is derived from information contained in copyright license data corresponding to the digital media data” as ( Tam, on page 3, paragraph 0049, content-related information is license ).

**As per claim 3**, Hunter in view of Tam disclose “wherein the copyright license data includes information that is used to control playback of the digital media data content” as (Tam, on page 3, [0049-0051, restricted section for playback).

**As per claim 4**, Hunter in view of Tam disclose “wherein the user device specific indicator includes the user device's unique identification data” as (Hunter on page 14, paragraph 0172, set top box identification code for use in watermark).

**As per claim 5**, Hunter in view of Tam disclose “wherein the watermark signal further includes information on the identity of the digital media data content owner” as ( Tam, on page 3, paragraph 0049, user information includes in watermark ).

**As per claim 6**, Hunter in view of Tam “wherein the digital media data content-related information includes the digital media data content subscriber information” as (Tam, on page 3, paragraph 0049, content owner includes in watermark ).

**As per claim 7**, Hunter in view of Tam “wherein the digital media data content-

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related information includes the expiration date of the copyright license” as (Tam, on page 3, paragraph 0049, copyright is added in watermark).

**As per claim 8**, Hunter in view of Tam “wherein the digital media data content-related information includes information on distribution rights of the copyright license” as (Tam, on page 3, paragraph 0049, license is added in watermark ).

**As per claim 9**, Hunter in view of Tam “wherein the digital media data content-related information includes information on the geographical limitations on the copyright license” as (Hunter, on page 3, paragraph 0041, and Fig 1 [104], content data includes consumer locations will view the distributed content on a television receiver using a device).

**As per claim 10**, Hunter in view of Tam “wherein the digital media data is multimedia data” as (Hunter, on page 3, paragraph 0044 and paragraph 0041, Movies, Music and education content).

**As per claim 11**, this claim is directed to a user device and contains limitations that are substantially similar to those recited in claim 1 above, and accordingly is rejected for similar reasons.

**As per claim 12**, this claim is directed to a user device and contains limitations that are substantially similar to those recited in claim 10 above, and accordingly is rejected for similar reasons.

**As per claim 13**, this claim is directed to a user device and contains limitations that are substantially similar to those recited in claim 2 above, and accordingly is rejected for similar reasons.

**As per claim 14**, this claim is directed to a user device and contains limitations that are substantially similar to those recited in claim 3 above, and accordingly is rejected for similar reasons.

**As per claim 15**, this claim is directed to a user device and contains limitations that are substantially similar to those recited in claim 6 above, and accordingly is rejected for similar reasons.

5. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter et al (20030061607) (hereinafter Hunter) in view of Tam et al (20030068043) (hereinafter Tam) and further in view of Zhao (Applying Digital Watermarking Techniques to online Multimedia Commerce)(hereinafter Zhao).

**As per claim 16**, Hunter disclose “A method of enforcing a digital media data content's copyright license” as (on page 3, paragraph 0041, watermarking at set top box ), comprising:

“receiving a digital media data content at a user device; decrypting the digital media data content into decrypted data in the user device; decoding the decrypted data into uncompressed data in the user device; receiving a copyright license data in the user

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device; extracting at least one digital media data content-related information from the copyright license data; a user device specific indicator, said digital media data content related information also including information selected from a group consisting of said uncompressed data, an audio portion of said uncompressed data, and a video portion of said uncompressed data, such that said watermark signal exhibits a relatively changed characteristic pattern over at least a segment of the uncompressed data into which the watermark signal is embedded; embedding the watermark signal into the uncompressed data” as ( on page 3, paragraph 0041 and 0166 and FIG 1, Set Top Box decode the content in uncompressed data and on page 13, paragraph 0167, watermark is generated by a media content player(e.g. set top box), with or without a networked server, during playback. Thus, the watermark may be generated in real time each time a movie is played and paragraph 0172, a player or set top box may be programmed to generate a unique transactional identification code for use in a watermark. The code may include a set top box identification code and on page 10, paragraph 0119, As a response to the request, system operator may provide an authorizing license for a particular title ); But Hunter fails to disclose “generating a watermark signal comprising the at least one digital media content-related information and identifying the watermark signal in a suspect copy of the digital media data content; and determining whether the suspect copy of the digital media data content was distributed according to the copyright license data”.



However, Tam disclose “generating a watermark signal comprising the at least one digital media content-related information” as ( on page 3, paragraph 0049, watermark is generated by adding copyright, license and user information).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hunter with those of Tam in order to develop a composite watermark including content information, thereby improving copyright protection in digital content.

Further more, Zhao disclose “identifying the watermark signal in a suspect copy of the digital media data content; and determining whether the suspect copy of the digital media data content was distributed according to the copyright license data” as (section 3.1, lines 17-22, watermark monitor is detected to detect the owner-watermark, it produces reports to identify who is using the images that are owned by a specific entity. By comparing the reports with licensing records, copyright infringements can be easily found).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hunter in view of Tam with those of Zhao in order to develop a composite watermark including watermark monitor, thereby providing an efficient protection to illegally copy digital content.

**As per claim 17**, Hunter in view of Tam in view of Zhao “wherein the digital

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media data is multimedia data” as (Hunter, on page 3, paragraph 0044, Movies, Music and education content).

**As per claim 18**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information is derived from information contained in a copyright license data corresponding to the digital media data” as (Tam, on page 3, paragraph 0049, content-related information is license).

**As per claim 19**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information includes digital media data content subscriber information” as (Tam, on page 3, paragraph 0049, content owner includes in watermark ).

**As per claim 20**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information includes information that is used to control playback of the digital media data content” as Tam, on page 3, [0049-0051, restricted section for playback).

**As per claim 21**, Hunter in view of Tam in view of Zhao “wherein the user device specific indicator includes the user device's unique identification data” as (Hunter on page 14, paragraph 0172, set top box identification code for use in watermark).

**As per claim 22**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information includes the expiration date of the copyright license” as (Tam, on page 3, paragraph 0049, copyright is added in watermark).

**As per claim 23**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information includes information on the distribution rights of

the copyright license” as (Tam, on page 3, paragraph 0049, license is added in watermark ).

**As per claim 24**, Hunter in view of Tam in view of Zhao “wherein the digital media data content- related information includes information on the geographical limitations on the copyright license” as(Hunter, on page 3, paragraph 0041, and Fig 1 [104], content data includes consumer locations will view the distributed content on a television receiver using a device ).

### **Conclusion**

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abu Sholeman whose telephone number is (571)270-

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7314. The examiner can normally be reached on Monday through Thursday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 12, 2009

Abu Sholeman  
Examiner  
Art unit 2437

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art  
Unit 2437

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